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EXAMINER	
BURLESON, MICHAEL L	

ART UNIT	PAPER NUMBER
2625	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/560,730	YAMAGUCHI ET AL.	
	Examiner	Art Unit	
	MICHAEL BURLESON	2625	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 05/09/07,03/05/08.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 28 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The program claimed is merely a set of instructions per se. Since the program is merely a set of instructions not embodied on a computer readable medium to realize the computer program functionality, the claimed subject matter is non-statutory.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1,13,14,17,18,21,22,28 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claims 1,13,14,17,18,21,22,28 and 29 state, "normally constitute area" and "not-normally-constituting area" Examiner fails to understand what these terms mean.

Claim Objections

4. Claims 4,6,8,9,10,12,14,16,18,20 and 22 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 3,5,7,11,13,15,17,19 and 21. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Duwaer US 4835602.

3. Regarding claim 1, Duwaer teaches a method of calculating correction data for correcting display characteristic, comprising the steps of:

4. displaying a test pattern on an image display device based on test pattern data; obtaining capture data by capturing the test pattern (column 3, lines 7-9 and column 5, lines 11-16); and

5. calculating correction data for correcting a display characteristic of the image display device based on the obtained capture data (column 5, lines 48-60),

6. wherein, when the obtained capture data does not normally constitute an entire image relating to the test pattern data, correction data relating to an entire image relating to the test pattern data including correction data of an area to be complemented is calculated by setting the area to be complemented so as to include the not-normally-constituting.-area and complementing the area to be complemented based on the area excluding the area to be complemented (column 7, lines 10-32).

7. Regarding claim 2, Duwaer teaches wherein the test pattern data is generated before the test pattern is displayed on the image display device (column 7, lines 10-16).

8. Regarding claim 3, Duwaer teaches wherein the display characteristic includes at least one of a geometric characteristic, a color characteristic, a luminance characteristic, a white balance characteristic and a gamma characteristic (column 7, lines 16-28).

9. Regarding claim 4, Duwaer teaches wherein the display characteristic includes at least one of a geometric characteristic, a color characteristic, a luminance characteristic, a white balance characteristic and a gamma characteristic (column 7, lines 16-28).

10. Regarding claim 5, Duwaer teaches wherein the calculation of correction data of the area to be complemented is performed by: obtaining capture data relating to the entire image relating to the test pattern data by complementing capture data of the area

to be complemented based on capture data of the area excluding the area to be complemented; and calculating correction data relating to the entire image relating to the test pattern data based on the obtained capture data (column 7, lines 16-28).

11. Regarding claim 6, Duwaer teaches wherein the calculation of correction data of the area to be complemented is performed by:

12. obtaining capture data relating to the entire image relating to the test pattern data by complementing capture data of the area to be complemented based on capture data of the area excluding the area to be complemented; and calculating correction data relating to the entire image relating to the test pattern data based on the obtained capture data (column 7, lines 10-28).

13. Regarding claim 7, Duwaer teaches wherein the calculation of correction data of the area to be complemented is performed by: calculating correction data of the area excluding the area to be complemented based on the capture data of the area excluding the area to be complemented; and complementing correction data of the area to be complemented based on the calculated correction data of the area excluding the area to be complemented (column 7, lines 10-28).

14. Regarding claim 8, Duwaer teaches wherein the calculation of correction data of the area • to be complemented is performed by: calculating correction data of the area excluding the area to be complemented based on the capture data of the area excluding the area to be complemented; and complementing correction data of the area to be complemented based on the calculated correction data of the area excluding the area to be complemented (column 7, lines 10-28).

15. Regarding claim 9, Duwaer teaches wherein the calculation of correction data of the area to be complemented is performed by:
calculating correction data of the entire area of the image relating to the capture data based on the capture data; and complementing correction data of the area to be complemented based on the correction data of the area excluding the area to be complemented in the calculated correction data (column 7, lines 10-28).

16. Regarding claim 10, Duwaer teaches wherein the calculation of correction data of the area to be complemented is performed by: calculating correction data of the entire area of the image relating to the capture data based on the capture data; and complementing correction data of the area to be complemented based on the correction data of the area excluding the area to be complemented in the calculated correction data (column 7, lines 10-28).

17. Regarding claim 11, Duwaer teaches wherein an image relating to the capture data is displayed before the area to be complemented is set; and the area to be complemented is set in accordance with a manual operation for the displayed image (column 5, lines 48-64).

18. Regarding claim 12, Duwaer teaches wherein an image relating to the capture data is displayed before the area to be complemented is set; and the area to be complemented is set in accordance with a manual operation for the displayed image (column 5, lines 48-64).

19. Regarding claim 13, Duwaer teaches wherein based on a result of recognition of an area that does not normally constitute the image relating to the test pattern data, the

recognition being made by analyzing the capture data, the area to be complemented is automatically set so as to include the recognized area (column 5, lines 48-64).

20. Regarding claim 14, Duwaer teaches wherein, based on a result of recognition of an area that does not normally constitute the image relating to the test pattern data, the recognition being made by analyzing the capture data, the area to be complemented is automatically set so as to include the recognized area (column 5, lines 48-64).

21. Regarding claim 15, Duwaer teaches wherein the analysis of capture data is performed by comparing multiple capture data corresponding to multiple test pattern data (column 7, lines 10-28).

22. Regarding claim 16, Duwaer teaches wherein the analysis of capture data is performed by comparing multiple capture data corresponding to multiple test pattern data (column 7, lines 10-28).

23. Regarding claim 17, Duwaer teaches wherein, the area to be complemented is automatically set so as to constitute the recognized area based on a result of recognition of an area that does not normally constitute the image relating to the test pattern data, the recognition being made by analyzing correction data of the entire area of the image relating to the capture data (column 7, lines 10-28).

24. Regarding claim 18, Duwaer teaches wherein, the area to be complemented is automatically set so as to constitute the recognized area based on a result of recognition of an area that does not normally constitute the image relating to the test pattern data, the recognition being made by analyzing correction data of the entire area of the image relating to the capture data (column 7, lines 10-28).

25. Regarding claim 19, Duwaer teaches wherein the analysis of capture data is performed by comparing correction data of the entire area of the images relating to multiple capture data corresponding to multiple test pattern data (column 7, lines 10-28).

26. Regarding claim 20, Duwaer teaches wherein the analysis of capture data is performed by comparing correction data of the entire area of the images relating to multiple capture data corresponding to multiple test pattern data (column 7, lines 10-28).

27. Regarding claim 21, Duwaer teaches wherein an obstacle is detected by using an obstacle detecting device before the area to be complemented is set; and the area to be complemented is automatically set so as to constitute the area based on a result of recognition of an image area corresponding to the detected obstacle as an area that does not normally constitute the image relating to the test pattern data (column 7, lines 10-32).

28. Regarding claim 22, Duwaer teaches wherein an obstacle is detected by using an obstacle detecting device before the area to be complemented is set; and the area to be complemented is automatically set so as to constitute the area based on a result of recognition of an image area corresponding to the detected obstacle as an area that does not normally constitute the image relating to the test pattern data (column 7, lines 10-32).

29. Regarding claim 23, Duwaer teaches wherein data of the area to be complemented is complemented by copying data of the area excluding the area to be complemented thereto (column 7, lines 10-28).

30. Regarding claim 24, Duwaer teaches wherein the complementing of the data of the area to be complemented is calculated from the data of the area excluding the area to be complemented based on a predetermined correlation (column 5, lines 1-32 and column 7, lines 10-28).

31. Regarding claim 25, Duwaer teaches wherein the predetermined correlation is a distance between the position of a part to be complemented in the area to be complemented and the position at which complementing data exists in the area excluding the area to be complemented (column 5, lines 1-32).

32. Regarding claim 26, Duwaer teaches wherein the image display device is a projection device including a projector for projecting an image and a screen for displaying the image projected by the projector (column 3, lines 6-9).

33. Regarding claim 27, Duwaer teaches wherein the image display device is a multi-projection device having multiple projectors each for projecting a partial image and a screen for displaying images projected by the multiple projectors and constructing one image as a whole by arranging partial images projected by the projectors on the screen in such a manner that the images are superimposed one over another at the edges of adjacent partial images (column 3, lines 6-18).

34. Regarding claim 28, Duwaer teaches a program for calculating correction data for correcting display characteristic, causing a computer to:
display, based on test pattern data, a test pattern on an image display device; obtain capture data by capturing the test pattern (column 3, lines 7-9 and column 5, lines 11-16);

35. and calculate, based on the obtained capture data, correction data for correcting a display characteristic of the image display device (column 5, lines 48-60),

36. wherein, when the obtained capture data does not normally constitute an entire image relating to the test pattern data, correction data relating to an entire image relating to the test pattern data including correction data of an area to be complemented is calculated by setting the area to be complemented so as to include the not-normally-constituting area and complementing the area to be complemented based on the area excluding the area to be complemented (column 7, lines 10-32).

37. Regarding claim 29, Duwaer teaches an apparatus for calculating correction data for correcting display characteristic, the apparatus comprising:

38. a capturing device for capturing a test pattern displayed on an image display device based on test pattern data and obtaining capture data (column 3, lines 7-9 and column 5, lines 11-16);

39. and a calculating device for calculating, based on the obtained capture data, correction data for correcting a display characteristic of the image display device (column 5, lines 48-60),

40. wherein, when the obtained capture data does not normally constitute an entire image relating to the test pattern data, correction data relating to an entire image relating to the test pattern data including correction data of an area to be complemented is calculated by setting the area to be complemented so as to include the not-normally-constituting area and complementing the area to be complemented based on the area excluding the area to be complemented (column 7, lines 10-32).

Conclusion

Any inquiry concerning this communication should be directed to Michael Burleson whose telephone number is (571) 272-7460 and fax number is (571) 273-7460. The examiner can normally be reached Monday thru Friday from 8:00 a.m. – 4:30p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached at (571) 272-7406.

Michael Burleson
Patent Examiner
Art Unit 2625

MIb
December 19, 2008

/Michael Burleson/

Examiner, Art Unit 2625

/Twyler L. Haskins/

Supervisory Patent Examiner, Art Unit 2625